tions here considered is greater in winter than in summer, and inversely the distances of the anticyclonic centers are smaller in winter than in summer.

20. In the land and the coast cyclones the greatest angle of deviation occurs at distances of 444-666 and 1110–1554 kilometers, respectively; the smallest angle occurs in the immediate neighborhood of the center, and in land cyclones at a distance of 1110–1332 kilometers; in coast cyclones from 1554-1776 kilometers.

21. At medium altitudes, on the contrary, the zone of 444-666 kilometers radius shows a principal minimum; thence, the angle increases as we go inward as well as outward and, at the distance of 666–888 kilometers, attains its principal maximum only to decrease again as it approaches the periphery of the cyclone.

22. In cyclones near the coast and at medium altitudes, the zones of the greatest and smallest angle (α) at a distance of from 444–666 kilometers, form the boundary of a cyclinder of air around which the outer air moves in spirals; on land, however, the orographic impediments disturb these very much.

23. In coast cyclones, in the exterior space, the greatest ascension of the air takes place on the south side, whereas the tangential forces hinder the ascent on the rear side. On the other hand, in land cyclones, in which the air flows inward spirally close up to the center, the location of the greatest ascension is transferred to the immediate neighborhood of the center. In consequence of the orographic inequalities, the maximum of rainfall may be shifted.

24. At medium altitudes in the inner zone the movements toward the center continue for the most part unchanged, but in the outer zones and in front there is an energetic outflow.

25. In regard to the individual seasons, in cyclones over the land, both at the ground and at medium altitudes, the various zones of (α's) show a shifting of location, whereas in coast cyclones the increase and decrease of the average value of the angle (α) occur in almost the same manner in the summer and winter seasons.

26. The variation, from summer to winter, of the greatest outflow on the Schneekoppe, indicated in theorem 18, and the resulting change in the direction of propagation of the cyclones, occurs also for each individual distance from the center. Since (although preponderating in the outer zone) in the winter season the greatest outflow occurs with westerly gradients and in the summer season with southwesterly gradients.

27. The velocity of the wind increases both with increasing distance from the periphery and from the center of the cyclone and attains two maxima, one of which is near the center and the other, according to the location of the cyclone, lies between 900 and 1300 kilometers distant from the center. In summer the location of the first maximum of the force of the wind is shoved away from its usual location near the center.

28. In anticyclones, both on the coast and over the land, the smallest angle (α) is close to the center; the largest angles are in the second zone and at the periphery.

29. On the other hand, at medium altitudes the largest (α) angles occur at distances of 666 to 888 kilometers and at 1998 to 2220 kilometers; the smallest angles are close to the center.

30. In anticyclones on the land and in those on the coast in winter the air flows from the center toward all sides of the periphery in spiral curves; furthermore, during the summer season, in the anticyclones on the coast a tangential movement of the air is observable in the north and east quadrants.

31. At medium altitudes the air on the front side flows rapidly outward, whereas in the rear it has a tendency to flow inward.

32. In anticyclones the velocity of the wind increases with increasing distance from the center and, according to the location of the area of high pressure, it attains two maxima, one of which lies at a distance of 666 to 888 kilometers; the other is in the neighborhood of the periphery.

33. The median altitude of the anticyclones is greater than that of the cyclones.

34. The coefficient of friction on the earth's surface (the k of Guldberg and Mohn) decreases as the stations are located nearer to the coast and, also, as the elevation above the earth's surface increases.

METEOROLOGY IN THE SUMMER SCHOOLS.

The development of summer schools at various universities has become a very important factor in our educational scheme. There are probably a dozen large institutions, such as Harvard, Cornell, Chicago, Columbian at Washington, and the University of Virginia at Charlottesville, that have taken up this work with great enthusiasm and very important results. These summer schools are not rivals of the various Chatauquan Assemblies, nor of the normal schools in the national educational assemblies. They fill a different field; they are peculiarly adapted to be the means of introducing new ideas to the teachers and officers of normal schools. They bring the best teachers of graded schools and academies and smaller colleges where teaching is the main thought, into close contact with the most progressive spirit of education, that which seeks out new lines of thought and new ways of looking at familiar subjects, thus leading up to original thought and research on the part of the scholar. It must be acknowledged that the rapid progress of modern civilization, or man's conquest of nature has depended on the development of the habits of independent original, but logical, not erratic, research into the laws of nature. There are those who in such work wander off into attractive but delusive byways and fail to accomplish anything. Such were the "Paradoxers" of De Morgan. It is the province of modern education culminating in the modern university, to stimulate logical and sound, original and independent trains of thought and work. From this point of view the summer school is doing a fine work, and Weather Bureau men who are so situated as to be able to contribute six weeks of hard work to this educational campaign will doubtless be rewarded by finding their best ideas reappear in the normal schools and the graded schools of the country.

THE WEATHER OF THE MONTH.

By Mr. W. B. STOCKMAN, District Forecaster, in charge of Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart IV and the average values and departures from normal are shown in Tables I and VI.

The mean barometric pressure was highest over the immediate coast of the North Pacific States, with readings of 30.10 inches. Another, and extensive, area of high but slightly lower mean pressure overlay the Ohio Valley and Tennessee and the east Gulf and South Atlantic States. The mean pressure was lowest over southwestern Arizona, with a minimum reading of 29.75 inches at Yuma.

The pressure was above the normal in the Pacific States, western Nevada, the northern Plateau region, in the Gulf States, and the Ohio Valley generally, and Tennessee, and in parts of the Mississippi Valley, with the greatest departures on the northern coast of California; elsewhere the mean pressure was below the normal, with the maximum minus departures at northern New England stations, where they were about —. 10 inch.